

I claim:

1. A method for identifying a far-end modem type, comprising:
transmitting a V.8 ANS_{am} tone to the far-end modem;
5 receiving a response signal from the far-end modem in response to the transmitted V.8 ANS_{am} tone; and
determining from the response signal whether the far-end modem is a commercial modem or a secure modem.
- 10 2. The method of claim 1, wherein determining whether the far-end modem is a commercial modem or a secure modem comprises determining whether the far-end modem is a V.series modem or an FSVS modem.
- 15 3. The method of claim 2, wherein determining whether the far-end modem is a commercial modem or a secure modem comprises:
determining whether the response signal is a V.8 CM tone; and
if the response signal is a V.8 CM tone, determining that the far-end modem as a V.8 modem.
- 20 4. The method of claim 1, wherein determining whether the far-end modem is a commercial modem or a secure modem comprises:
determining whether the response signal has a nominal frequency of about 1800 Hz; and
if the response signal has a nominal frequency of about 1800 Hz,
25 determining from the response signal whether the far-end modem is a V.32 modem or a secure modem.

5. The method of claim 4, wherein determining whether the far-end modem is a V.32 modem or a secure modem comprises:
 determining whether the response signal includes phase shifts; and
 if the response signal does not include phase shifts, determining
5 that the far-end modem is a V.32 modem.
6. The method of claim 4, wherein determining whether the far-end modem is a V.32 modem or a secure modem comprises:
 determining whether the response signal includes phase shifts; and
10 if the response signal includes phase shifts, determining that the far-end modem is a secure modem.
7. The method of claim 1, further comprising:
 determining from the response signal, an operational mode of the
15 far-end modem.
8. The method of claim 7, wherein determining the operational mode of the far-end modem comprises:
 determining whether the response signal includes phase reversals;
20 and
 if the response signal includes phase reversals, determining that the far-end modem is an FSVS modem in alternate mode.
9. The method of claim 7, wherein determining the operational mode of
25 the far-end modem comprises:
 determining whether the response signal includes a 128 dibit gap;
 and
 if the response signal includes a 128 dibit gap, determining that the far-end modem is an FSVS modem in half-duplex mode.

10. The method of claim 7, wherein determining the operational mode of the far-end modem comprises:

 determining whether the response signal includes phase reversals;

 determining whether the response signal includes a 128 dibit gap;

5 and

 if the response signal does not include phase reversals or a 128 dibit gap, determining that the far-end modem is an FSVS modem in interoperable mode.

10 11. A method for determining a far-end modem type, comprising:
 transmitting to the far-end modem a P1800 Hz tone with phase reversals;

 receiving a response signal from the far-end modem in response to the transmitted P1800 Hz tone; and

15 determining from the response signal whether the far-end modem is a commercial modem or a secure modem.

12. The method of claim 11, wherein determining from the response signal whether the far-end modem is a commercial modem or a secure modem
20 comprises:

 determining whether the far-end modem is a V.32 modem or a secure modem.

13. The method of claim 12, wherein determining whether the far-end
25 modem is a V.32 modem or a secure modem comprises:

 determining whether the response signal includes a V.32 AC; and

 if the response signal includes a V.32 AC, determining that the far-end modem is a V.32 modem.

14. The method of claim 11, further comprising:
determining whether the response signal includes an FSVS
Message A; and
if the response signal includes an FSVS Message A, determining
5 that the far-end modem is an FSVS modem in alternate signaling mode.
15. The method of claim 11, further comprising:
determining whether the response signal includes a V.32 AC;
determining whether the response signal includes an FSVS
10 Message A; and
if the response signal includes neither a V.32 AC nor an FSVS
Message A, determining that the far-end modem is an FSVS modem in
interoperable mode.
- 15 16. The method of claim 11, further comprising:
monitoring an incoming channel for energy at 2100 Hz; and
if 2100 Hz energy is present in the incoming channel for at least
about one second, then determining whether the far-end modem is a V.32
compliant commercial modem or a secure modem in interoperable mode or
20 alternate mode.
17. A method for determining a far-end modem type, comprising:
monitoring an incoming channel for the presence of any of 1800 Hz
energy or 2100 Hz energy;
25 if 1800 Hz energy is present in the incoming channel for at least
about one second, then determining that the far-end modem is a secure modem
in half-duplex mode; and
if 2100 Hz energy is present in the incoming channel for at least
about one second, then determining whether the far-end modem is a V.32 modem
30 or a secure modem in interoperable mode or alternate mode.

18. The method of claim 17, further comprising:
 monitoring the incoming channel for the presence of a V.8 ANS_{am}
tone; and
 if a V.8 ANS_{am} tone is present in the incoming channel, then
5 determining that the far-end modem is a V.8 modem.
19. A computer-readable medium having stored thereon computer
executable instructions for performing a method for identifying a far-end modem
type, comprising:
10 transmitting a V.8 ANS_{am} tone to the far-end modem;
 receiving a response signal from the far-end modem in response to
the transmitted V.8 ANS_{am} tone; and
 determining from the response signal whether the far-end modem is
a commercial modem or a secure modem.
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20. A computer-readable medium having stored thereon computer
executable instructions for performing a method for identifying a far-end modem
type, comprising:
 transmitting to the far-end modem a P1800 Hz tone with phase
20 reversals;
 receiving a response signal from the far-end modem in response to
the transmitted P1800 Hz tone; and
 determining from the response signal whether the far-end modem is
a commercial modem or a secure modem.